

***Phalacrus kabourecki* sp. nov. (Coleoptera: Phalacridae) from Indonesia**

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Abstract. *Phalacrus kabourecki* sp. nov. from Indonesia (Sumatra) is described and distinguished from all the similar oriental species of the genus. *Olibrus obscurus* Guillebeau, 1892 is proposed as a junior synonym of the Holarctic species *Olibrus bicolor* Fabricius, 1792.

INTRODUCTION

The species of the genus *Phalacrus* Paykull, 1800, that comprises 96 valid taxa (Gimmel 2013), are widespread distributed - occurring in the Nearctic, Neotropic, Palaearctic, Oriental and Australasian Regions. Altogether 22 species are known from the Oriental Region. In the present paper, one more species new to science is added to the Oriental fauna.

The genus is morphologically well separated from the other phalacrid genera having unique combination of the morphological characters, before all - rounded antero-lateral margin of head in the dorsal view without any emargination above the antennal insertion, unusually large scutellum, single sutural stria (exceptionally missing), very broad, well developed process of metaventrite reaching at least anterior level of mesocoxae, lack of coxal lines on metaventrite, very specific shape of the aedeagus possessing fused parameres, specific shape of distal part of the ovipositor, and unpaired reduced internal sac of the median lobe of the aedeagus. The probable monophyly of the genus also means a distinct uniformity of the morphological characters and also the similarity of the genitalia, especially in males, causing difficulties in the identification of some species.

Recent studies in the genus *Olibrus* Erichson, 1845 enabled me to propose a new synonymy in this paper.

MATERIAL AND METHODS

The present paper is based on the material collected by the Czech entomologist Vít Kabourek in Indonesian Sumatra and the phalacrid material housed in the National Museum, Prague, Czech Republic.

Abbreviations of body parts and measurements:

- | | |
|----------|--|
| AII-AXI | Antennomeres II-XI. |
| AIII/AII | The ratio of the length or width of the antennomeres III:II. |
| L | Length. |

W Width.
L/W or W/L Ratio between measurements

Terminology:

median lobe = median lobe of aedeagus,

parallelogram = micro-sculpture represented by cells with predominantly parallel long transversally oriented strigosities connecting each other by short conjunctions.

E- puncture = puncture of approximately semicircular shape opened caudally with raised anterior margin, frequently with short seta placed in the middle of puncture margin resembling capital letter E.

Abbreviations of the collections:

ZSPC Zdeněk Švec, Prague, private collection, Czech Republic;

VKZC Vít Kabourek, Zlín, private collection, Czech Republic.

The description is based on the holotype only. Measurements of the body length and the individual body parts were measured to the first decimal place of millimetre. The dissected male and female genitalia and other body parts were mounted in polyvinylpyrrolidone (Lompe 1986) on a transparent card added to the same pin as the type specimen. The type specimens are indicated by a red label added to the same pin bearing the status of the specimen (holotypus or paratypus respectively), its name, name of the author and year of designation.

Data quoted from the labels accompanying the specimens are reproduced verbatim; an oblique line (/) indicates a line break on a label.

The variability is mentioned in the paragraph "Variation" and includes features exhibited by paratypes. Those characters that seem to be usual and characteristic in the genus mentioned in the paragraph Introduction, further type of venter microsculpture, setosity on antennae, legs and venter, shape of terminal antennomere, widened anterior tarsomeres are not mentioned in the descriptions. Those characters that can be considered for relatively stable within the individual species - namely the ratios of the length and width of the terminal antennomeres, presence or absence of the dorsal microsculpture, presence and amount of terminal lateral spines of the fore tibia, presence or absence of the border on the pronotal basal margin, type of elytral puncturation and above all the shape of the ovipositor are pointed out in the description of the new species.

The material mentioned in this paper is deposited in the collections of ZSPC and VKZC.

TAXONOMY

Phalacrus kabourecki sp. nov.

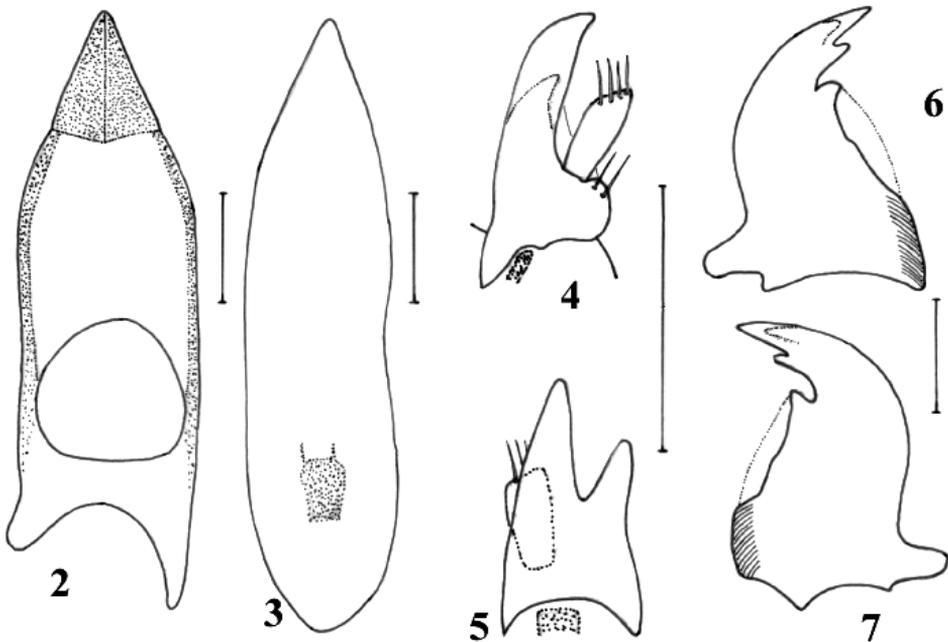
(Figs. 1-7)

Type material. Holotype (♂): "N SUMATRA - Brastagi/ Mt 20.-26.iv.1998/ Sibayak 1500-2000 m / lgt. Vít Kabourek", (ZSPC). Paratypes: (5 ♂♂, 4 ♀♀, 75 specimens), the same data (ZSPC, VKZC).

Description. Length 2.1 mm, head 0.2 mm, pronotum 0.7 mm, elytra 1.2 mm, antenna 0.6 mm, maximum width of head 0.7 mm, pronotum 1.4 mm at base, elytra 1.5 mm closely behind shoulders.



Figs. 1-7. *Phalacrus kaboueki* sp. nov.: 1- body, dorsal view; 2- shape of aedeagus, dorsally; 3- median lobe, dorsally; 4- apical part of ovipositor, dorsally; 5- coxite laterally; 6, 7- mandibles. Dotted lines show translucent ventral or internal structures. Scale bar = 0.1 mm in Figs. 2-7.



Broadly oval as in Fig. 1, light red-brown, lateral margins of pronotum and elytra lighter, elytra seemingly bicoloured with triangular feebly bordered dark stain on elytral base oriented by its tip caudally and reaching almost middle of elytra. Seeming stain is caused by translucent dark metascutum. Antennae and legs light yellow-brown. Venter yellow-reddish

with darker longitudinal broad strip starting at anterior margin of metaventral process, ending at first visible abdominal sternum.

Head. Feebly microsculptured by parallelograms, distinctly punctate, punctures separated approximately by 2 times their own diameter. Ratios of length of antennomeres II-XI (AII equal to 1.0): 1.0-1.0-0.7-0.6-0.4-0.4-0.4-0.9-0.8-3.6. The same ratio of width: 1.0-0.6-0.6-0.6-0.8-1.0-1.2-2.0-2.8-2.8. W/L of AIX-AXI: 1.1-1.5-0.4. Both mandibles tridentate apically with one terminal tooth-like process, a second placed medially and a third ventrally (Figs. 6, 7).

Pronotum. With fine microsculpture similar to that on head, a little more expressed. Puncturation finer and sparser than that on head with some large punctures rarely disseminated. Basic punctures separated by approximately 4-5 times their own diameter. Base unbordered. Posterior angles acute with pointed tip in dorsal view; rectangular with pointed tip laterally seen.

Scutellum. Microsculptured as on pronotum with puncturation a little stronger.

Elytra. Microsculptured similarly as on pronotum; parallelograms getting shorter becoming almost regular microreticulation toward lateral sides and also apically. Sutural stria confined to apical half of elytra. Suture bordered in caudal three quarters of its length. Traces of broad very shallow and unobtrusive several elytral striae hardly detectable on disc. Laterally and apically striae evanescent. Elytral rows of punctures adjacent to striae (when detectable) consist of E-punctures spaced by about 1.5-2.0 times their own diameters from each other laterally on disc. Row punctures getting smaller toward base, getting larger laterally and apically, almost touching each other laterally in some places. Intervals with very small simple punctures separated by about 10 or more times their own diameter.

Metaventrite. Very finely punctured on metaventral process and also on median part of metaventrite. Punctures bear recumbent light hairs. Metaventrite with feeble oblique microsculpture laterally.

Abdominal sterna. Visible abdominal sterna finely punctate with punctures bearing recumbent light hairs forming sparsely haired broad longitudinal median strip.

Legs. Anterior tibiae slightly bent with 2 spines laterally before apex. Median tibiae distinctly bent, wider than anterior and posterior tibiae. Posterior tibiae slightly bent.

Genitalia. Male genitalia as in Figs. 2, 3, distal part of ovipositor as in Figs. 4, 5.

Bionomics. Unknown.

Variation. Length of body 1.8-2.1 mm. Length ratio of AIII/AII = 0.8-1.0, length ratio of AXI/AX+AIX = 1.9-2.2. Some of the paratypes unicolorous yellowish-or reddish-brown due to lightly coloured metascutum.

Derivatio nominis. The species is dedicated to the collector, my entomological colleague, Vít Kabourek.

Differential diagnosis. As the great majority of the *Phalacrus* species are black and also mostly with dark appendages, *Phalacrus kabourecki* sp. nov. belongs to the minority of

those *Phalacrus* species that are of a different colouring. The new species is most similar to *Phalacrus rufoguttatus* Lyubarsky, 1994 having small size of body, entirely microsculptured dorsum, not bordered pronotal base and the last antennomere approximately twice as long as the antennomeres 9th + 10th together and by usually bicoloured elytra although the dark stain on the elytra of *Ph. kabourecki* is seeming only. The male genitalia are similar in both species that is not too exceptional within the genus. The shape of the ovipositor of *Ph. rufoguttatus* is not known. *Phalacrus kabourecki* differs from *Ph. rufoguttatus* by the type of elytral puncturation and by lack of round red spot on each elytron. Elytra besides possessing small sparsely arranged punctures are also punctured by transverse punctures called E-punctures that are open posteriorly with raised anterior margin in the new species. The elytral punctures are rounded only in *Ph. rufoguttatus*. Elytra of *Ph. kabourecki* are reddish-brown, usually seemingly bicoloured with basal large not well bordered dark brown stain getting narrow caudally showing through dark triangular metascutum. The slim shape of aedeagus of *Ph. kabourecki* is similar to that in *Phalacrus punctatus* Champion, 1925, the shape of ovipositor of *Ph. kabourecki* resembles that in *Phalacrus brevidens* Champion, 1925 having coxite with a stout dent on ventral side. From the first mentioned species *Ph. kabourecki* differs beside other characters by the presence of one ventral tooth-like process on coxite while coxite possesses two ventral teeth in *Ph. brevidens*; from the later species it differs by parameres not widened laterally before their tip in the dorsal view.

***Olibrus bicolor* (Fabricius, 1792)**

Sphaeridium bicolor Fabricius, 1792: 82.

Olibrus bicolor var. *obscurus* Guillebeau, 1892: 184; *Olibrus obscurus* Guillebeau, 1892: Švec 2007: 509 **syn. nov.**

Comments. Guillebeau (1892) described *Olibrus bicolor* var. *obscurus* in a few words only: “Presque entièrement noir, la tache subapicale à peine distincte”. Nevertheless, as the species *Olibrus bicolor* is well distinguishable species, the original description of the variety *obscurus* seems to be sufficient enough. Much later not having the real possibility to check the Guillebeaus type or relevant sufficient material that could clarify the taxonomic problem concerning the status of the taxon, Švec (2007) put the taxon as valid species in the Catalogue of Palaearctic Coleoptera. Later, studies in the extensive phalacrid material housed in the National Museum in Prague indicate that the specimens agreeing with the Guillebeau’s description being almost black with very feebly recognizable elytral apical spot occurring in various regions of Europe can be attributed to the Holarctic *O. bicolor* (Fabricius, 1792). Those dark specimens agree well in the morphological structures of dorsum and metaventrite and also in the shape of the aedeagus. Therefore *Olibrus obscurus* Guillebeau, 1892 is proposed as a junior synonym of *O. bicolor* (Fabricius, 1792).

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